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Dear Nail Friends

Six months wait is over and it's time to welcome yet another edition of **ONYCHOSCOPE; i.e. 15th issue, 2019**. Due to its rich academic content including pearls from the nail sessions in various conferences, recent updates and consistent brain teasers, ONYCHOSCOPE is a much-awaited newsletter for everyone.

NAIL, as an appendage is getting its due recognition in India and **NSI** deserves to be applauded for making it happen. It has become customary to have Focus Nail Sessions during most state, zonal and National conferences. The year 2019 began with the **DERMACON International, 2019** at Bangalore; where a Nail Surgical Workshop with video demonstration was included along with a session on 'Nail disorders'. In **ACSICON 2019** (an annual Mega Dermatosurgery event) held in April, a 4-hour long surgical workshop was included that saw participation of nail experts from all across the globe. This Nail journey continued in recently concluded World Congress of Dermatology (**24th WCD, Milan**) with active participation of Indian invited speakers in Nail Sessions. We feel grateful to our fellow NSI members for this persistent and unflinching support. The growth in the field of NAIL is evident from the good quality research papers pertaining to Nail Disorders, published from India.

The present issue of ONYCHOSCOPE carries **Faculty Write Up** by **Prof Niti Khunger**, and **'What's new in NAIL'** by Dr Krati Malhotra. Dr Khuspreet Kaur Mann and Dr Jayashree have contributed the regular brainteasers; Nail Maze and Nail Quiz. A lucid report of the conference proceedings of ACSICON has been prepared by Dr Chander Grover.

We look forward to the valuable presence and active participation of all NSI members and their friends during **8th ONYCHOCON**, to be held in the City Of Dreams; **Mumbai during 3rd & 4th Nov 2019**. The very capable **Dr Sushil Tahiliani** and **Dynamic Mumbai Team** will organize this annual conference. In addition to the international Nail Faculty Prof Bertrand Richert and Dr Anita Takwale, presence of **legendary Prof Robert Baran** will definitely make this academic event very unique and exciting.

Viva La Vida NSI!

Archana Singal



Laser Treatment of Onychomycosis – Is It Effective



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Introduction

Onychomycosis is a common persistent fungal infection of the nail, accounting for 50% of nail disorders, primarily caused by dermatophytes and occasionally by yeasts and non-dermatophyte molds^{1,2}. Current treatment modalities include oral and topical antifungal agents, surgical approaches such as mechanical, chemical, or surgical nail avulsion, lasers and photodynamic therapy. However treatment is challenging because of lower response rates, high recurrence rates and increasing resistance to antifungal agents. Topical therapy plays a limited role due to poor penetration of drugs over a thickened nail plate. Systemic drugs like terbinafine and itraconazole can cause potential drug interactions, particularly in the elderly and have to be given for at least six to nine months. Lasers have been recently explored as a therapeutic option in the management of onychomycosis²⁻⁴. The Q-switched Nd:YAG laser, long-pulsed Nd:YAG laser and the fractional CO₂ laser have been reported to be effective in the management of onychomycosis. The erbium YAG laser and photodynamic therapy have also been used. The exact mechanism is unknown, but growth retardation and destruction by the heat produced plays a major role. The biggest advantage of laser therapy is that it is able to deliver energy to the affected nails without any systemic side effects.

Method of Laser Application

The diagnosis is confirmed by KOH microscopy and fungal culture. Dermoscopy is a useful adjunct which can corroborate the diagnosis and help to monitor the response to treatment. The affected nails are preferably thinned out to a thickness of 1-3 mm before application of the laser. Spot diameters, energy fluence and exposure time vary according to the laser machine. The laser is applied in a criss-cross pattern, vertically and horizontally, to cover the full nail surface.



Fig.1: Before treatment.

Q-switched Nd:YAG Laser

The 1064 nm Q-switched Nd:YAG laser has the ability to pass into the nail bed, leading to extremely high temperatures, which inhibits growth of fungus and causes damage to target cells. The temperature should exceed 45°C to be effective as normal body temperature of 37°C is the optimal growth temperature for fungi. High temperatures, also lead to toxic levels of adenosine triphosphate (ATP) and oxygen, disrupting fungal mitochondrial membrane potential. This causes slower growth rates and eventually cessation of growth of the fungus⁵⁻⁷. In addition, the 1064 nm wavelength might also be useful in targeting the blood supply associated with fungal viability. In addition to thermal damage, melanin found in the cell walls of *Trichophyton species*, also acts as a chromophore for the 1,064-nm wavelength. It has been proposed that in fungal infection by *T. Rubrum*, 532 nm NdYAG laser may be more effective due to the presence of xanthomagnin, which is a red pigment produced by *T. rubrum*⁵. However the disadvantage is that it cannot penetrate too deeply because of shorter wavelength as compared to the 1064 nm.

A study of 120 patients between 6-79 years of age, including 2 children, and 733 nails, treated with a single session of the Q-switched Nd:YAG laser, reported a 93% clinical response rate at 3 months. At 6 months after the laser treatment there was a 100% response rate, that included a clinical and mycological response with negative KOH. No adverse effects were recorded⁸. In another study, 72 patients with involvement of 194 nails were treated with 1,064-nm Nd:YAG laser (4-mm spot size, pulse duration 35 ms, fluence 35-40 J/cm² and repetition rate of 1 Hz, Dualis SP; Fotona, Slovenia) with 4 sessions at weekly intervals. The mean temperature recorded was 45 ± 5°C. A cure rate of 95.8% was observed three months after treatment⁹.



Fig.2: After 3 laser sessions holes created by the fractional laser.



Fig.3: 12 weeks after the last laser treatment.

Long-Pulsed 1064-nm Nd:YAG Laser

The long-pulsed 1064-nm Nd:YAG laser has also been used for the treatment of onychomycosis. In a study by Piccolo et al^{10,20} patients were treated and for 4 sessions at one week intervals. Three passes were given with 1 minute interval between the passes. Excellent results were obtained in 14 (70%) patients with reduction in chromonychia, opacity and onycholysis.

In another study on 15 patients with mycologically confirmed onychomycosis, long-pulsed 1064-nm Nd:YAG laser therapy was conducted by moving the beam in a spiral pattern over the whole nail plate for two passes, with a 1-minute pause between passes¹¹. The parameters were 4mm spot size, and fluence ranging from 40 to 60 J/cm². Treatment was repeated weekly for 4 sessions. Mycologic cure was achieved in nine patients (60%), most of whom were infected with *Trichophyton* sp., while clinical clearance was achieved in seven patients (47%), all of whom were infected with *Trichophyton* sp. Patients infected with *Epidermophyton* or *Candida* or *Aspergillus* did not respond to treatment.

Fractional CO2 Laser

The fractional CO2 laser has also been used in the treatment of onychomycosis. It acts by heating of tissue and also as a means of drug delivery by penetrating the nail plate. Shi et al¹² treated 30 participants with 124 nails involved with fractional CO2 laser treatment at 2-week intervals combined with terbinafine cream once daily for 6 months. The clinical efficacy rate (CER) with normal appearing nails was 58.9% at the end of treatment, 63.5% at 1 month after the last treatment and 68.5% at 3 months after the last treatment. The mycological cure rate (MCR) was 77.4% at 1 month and 74.2% at 3 months after the last treatment. A significantly better response was observed in patients with age <50 years, nail thickness <2 mm and distal lateral subungual onychomycosis (DLSO) and superficial white onychomycosis (SWO) type of onychomycosis infected by *Trichophyton rubrum* or *mentagrophytes*. Mild tolerable burning sensation during laser treatment was the only adverse effect reported.

In another study by Bhatta et al¹³ 24 patients with toenail infection were treated with fractional carbon-dioxide laser therapy for 3 sessions at monthly intervals, combined with daily topical amorolfine cream. The clinical response rate was 92% and MCR was 50% with no recurrences within 3 months.

Bhatta et al¹⁴ treated 75 patients with 356 onychomycotic nails confirmed by mycologic examination with 3 sessions of laser therapy at 4-week intervals and once-daily application of terbinafine cream for 3 months. In all, 94.66% of treated patients were KOH negative and 92% were culture negative after 3 months of treatment. However at 6 months only 84% and 80% were potassium hydroxide and culture negative, respectively.

The fractional 2940-nm Er:YAG laser in combination with topical amorolfine nail laquer¹⁵, photodynamic therapy in combination with fractional CO2 laser¹⁶ and low level laser treatment¹⁷ (LLT) are some of the other modalities used in the treatment of onychomycosis.

In a personal unpublished study of 50 patients with onychomycosis, fractional CO2 laser assisted application of 5% amorolfine cream 3 (6%) showed a complete response (fully normal-appearing nail measured from the proximal nail fold to involved nail), 28 (56%) showed a moderate response (20-60% normal-appearing nail

compared with the area of the initially infected nail), 8 (16%) showed a significant response (60% normal-appearing nail) and 11 (22%) showed no response (<20% normal-appearing nail) DSLO type showed a better response as compared to total dystrophic type.

Conclusion

Treating onychomycosis is challenging as topical agents do not penetrate the nail plate adequately to reach the nail bed and systemic therapy is prolonged and can cause drug interactions and adverse effects leading to poor treatment adherence. Laser therapy offers a targeted approach with fewer treatment sessions, devoid of any major side effects. Though literature supports the efficacy of these devices, more data are still needed on the type of laser, optimal laser protocols to achieve clinical and mycological clearance and the duration of long-lasting efficacy and safety of various laser devices.

Acknowledgement to Dr Prateek Sharma for clinical photographs.

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PHOTO QUIZ

A 30 year old mason presented with complaints of nail changes, progressively affecting multiple fingers of left hand of 6 months duration. He noticed yellowish discoloration and easy breakage of thumb nail followed by index, ring and little finger nails after which the nails stopped growing leaving roughened surfaces towards the distal end.

On examination, there was onycholysis, longitudinal striation (onychorrhexis), subungual hyperkeratosis, partial anonychia affecting four fingers of the left hand alone. The middle finger and right hand finger nails were free of any changes. Rest of the skin and mucosal examination was normal (**Fig. 1**). Onychoscopy findings are shown in **Fig 2**.

Nail matrix biopsy was done from the little finger and sent for histopathological examination along with overlying nail plate. Matrix showed moderately dense superficial perivascular lichenoid infiltrate with slight epidermal hyperplasia and basal layer damage. The dermoepidermal junction was infiltrated by lymphocytes and showed occasional necrotic keratinocytes/colloid bodies. The granular layer was focally thickened. The nail plate showed compact orthohyperkeratosis with small foci of parakeratosis. PAS stain was negative (**Fig. 3**).

Q.1: What is your diagnosis?

Q.2: What are the onychoscopy findings in this condition? (Fig 2)

Q.3: What is the management?



Figure 1



Figure 2

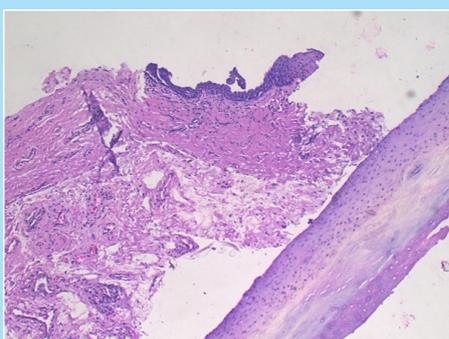


Figure 3

Answers on page - 9

CONFERENCE REPORT

17th National Conference of Association of Cutaneous Surgeons (I) [ACSICON 2019]

ACSICON 2019, the 17th Annual National Conference of the Association of Cutaneous Surgeons (I), was organized at Delhi-NCR from 18-21st April, 2019. This unique conference was biggest so far with a participation of 1000+ registered delegates from India and abroad. The conference accorded due importance to the rapidly expanding field of Nail Surgery by devoting a pre-conference workshop (live demonstration in operation theatre); a conference workshop (video-based demonstration); and a devoted session during conference proceedings. All in all, there were 10 hours devoted to nail surgery with additional plenary lecture on "Surgical management of Nail Tumours" delivered by Dr Bertrand Richert. He discussed the approach to surgical removal depending on the part of the nail unit these tumors involved. The organizing team of Dr RP Gupta and Dr Vineet Relhan (Organizing chairperson and Secretary, respectively) and Scientific Team of Dr Somesh Gupta and Dr Chander Grover (Scientific Chair and Secretary, respectively) wove an elaborate program covering all aspects of nail surgery delivered through renowned international experts (Dr Eckart Haneke, Dr Bertrand Richert and Dr Thomas Knackstedt) and reputed national faculty.

18th April, 2019: Pre-Conference Workshop on Nail Surgery (PCW-10)

Venue: Operation theatre, Department of Dermatology and STD, AIIMS, Ansari Nagar, Delhi

Course Director: Dr Chander Grover

Course Co-ordinator: Dr Savera Gupta

Workshop Faculty: Dr Shikha Bansal

Participants: 10

Dr Shikha Bansal took an initial 20 min presentation on Surgical anatomy of the nail, anesthesia techniques and



important instruments for nail surgery. This was followed by all the participants shifting to the operation theatre where all the techniques were demonstrated one after the other by Dr Chander Grover. She started with intralesional therapies in nail where she demonstrated both intra-matrix and intra-bed injections for various nail disorders. She also demonstrated intra-lesional bleomycin injections for periungual and subungual warts. This was followed by a demonstration of nail bed biopsy for a patient with suspected nail psoriasis. Thereafter a nail matrix biopsy for a patient with suspected nail lichen planus was demonstrated. During these procedures she explained to the participants regarding both proximal and distal nail avulsion techniques. All along, the basic procedures like proximal block, exsanguination, tourniquet etc were repeatedly reinforced. Thereafter transungual surgical excision of a nail matrix glomus tumor was done which was highly appreciated by the participants who even recorded videos for later recall. Various techniques of nail dressing and routine post-operative procedure were also demonstrated and discussed.

19th April, 2019: Conference Workshop on Nail Surgery (PCW-10)

Venue: Hotel Leela Ambience, Gurugram

Course Directors: Dr Archana Singal, Dr Chander Grover

Workshop Type: Lecture cum video-based Workshop

Participants: 50

The first part of this workshop was devoted to the basics of nail surgery wherein Dr Deepak Jakhar and Dr Harsh Tahilaini dealt with fundamental concepts of operating around the nail unit and administering anesthesia. Dr Jakhar demonstrated nail anatomy through pictures of cadaveric dissection of the nail unit, done by himself.

Next, the injectable therapies in and around the nail unit were detailed. Dr Mahajan talked about intra-matrix therapy for inflammatory nail dystrophies with different agents including triamcinolone, methotrexate, cyclosporine



etc. Dr Archana Singal demonstrated the effective use of bleomycin for peri and subungually located warts. The procedural details and treatment results were shown.

The section devoted to nail biopsy comprehensively covered the various techniques. Dr Shikha Bansal elaborated on appropriate site selection, through illustrative examples as this is the single most important step in ensuring a good histopathological outcome. Following this, Dr Savitha Somaiah showed various nail biopsy techniques while Dr Shilpa K specifically demonstrated nail matrix biopsy techniques.

The next part dealt with an effective management of ingrown toe nail. Dr Manas Puhan demonstrated conservative management with tube insertion, which is expelled as the nail grows out. Dr Bertrand Richert showed the procedure for more extensive soft tissue surgery techniques as well as chemical cauterization methods for management of advanced cases. Then, Dr Sushil Tahiliani demonstrated the management of a pincer nail.

The section on nail tumors had Dr Eckart Haneke detail out the presentation and management of various nail specific benign tumors. Dr Chander Grover deliberated upon various techniques to manage glomus tumors in the nail bed or nail matrix location. Dr Thomas Knackstedt then shared his experience with management of melanoma of the nail unit, demonstrating both functional surgeries as well as radical procedures.

The last section consisted of miscellaneous talks where Dr Vineet Relhan presented his experience with chronic paronychia surgery for refractory cases and its treatment outcomes. Dr Avitus John showed results with the use of various laser technologies in onychomycosis, Dr Soni Nanda demonstrated how dermatologists can perform nail aesthetic procedures like chemical peeling and gel nail application, to enhance the nail appearance for their patients, at the same time ensuring no adverse effects. Innovative ways to make nail surgery easier were shown by Dr Sanjeev Gupta where he demonstrated his specialised biopsy punches for biopsying particularly thick nails.

20th April, 2019: Conference Session on Nail Surgery

Venue: Hotel Leela Ambience, Gurugram

Participants: 70

This was an interesting and compact session where practical points regarding nail surgery were discussed.



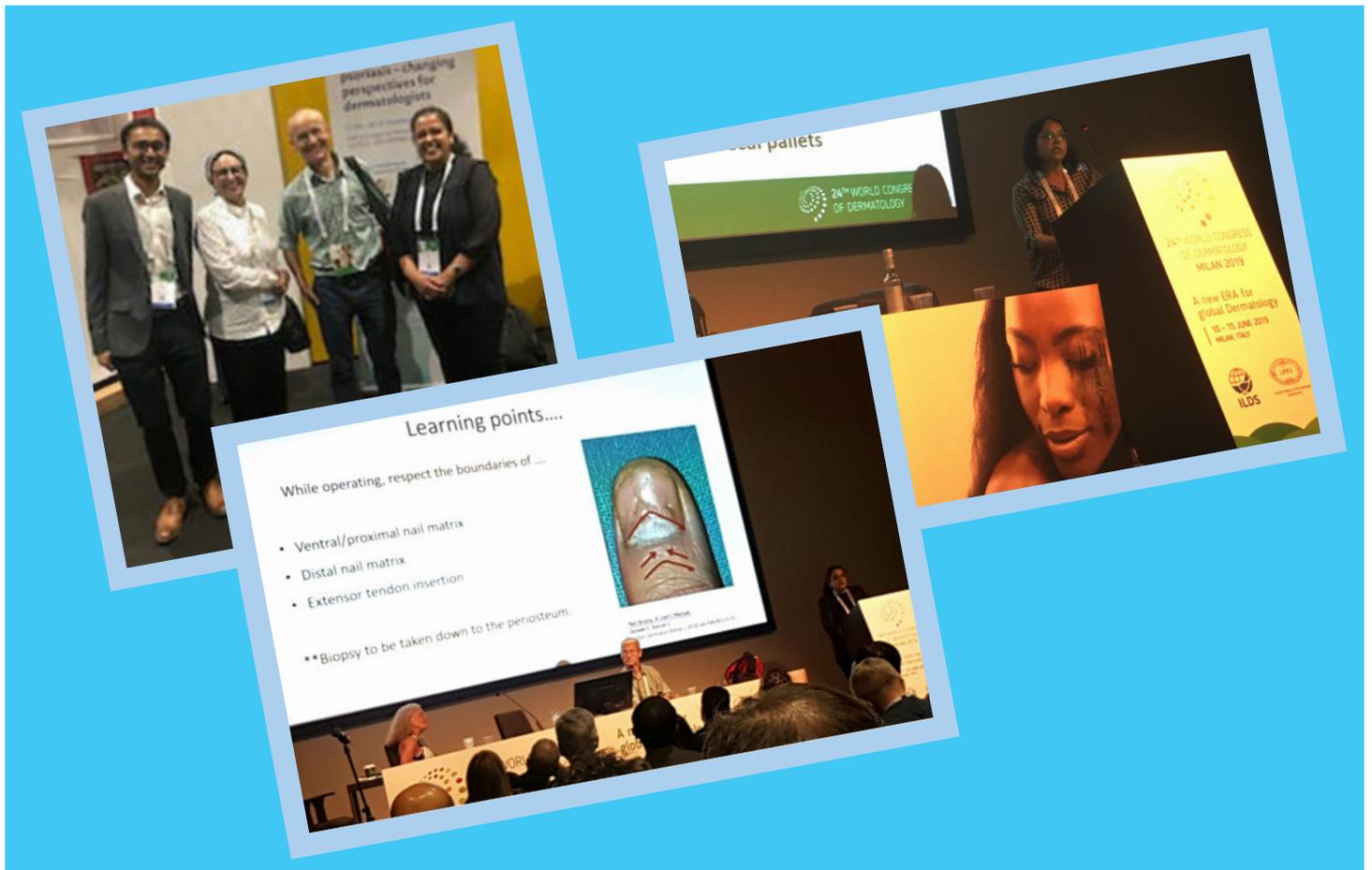
At first, Dr Soniya Mahajan gave a video demonstration of nail splinting with plastic tube which can be used for early stages of ingrown nail. Then, Dr Raghunatha Reddy showed the lateral nail matrix phenolisation technique for ingrown management. This was followed by a detailed overview of melnychia, and when to worry, by Dr Thomas Knackstedt. He took us through case scenarios demonstrating the signs of malignancy and how to detect and manage it early. Dr Eckart Haneke gave an authoritative talk on advanced nail surgery which covered mechanical and neoplastic conditions, how they are managed, while preventing long term damage to nail unit whenever possible. Then Dr Chander Grover moderated a discussion



on tips and tricks in nail surgery where eminent nail surgeons like Drs Richert, Haneke, Knackstedt, Tahiliani, Reddy and Relhan shared their practical points regarding small things like choice of anesthetic, tourniquet options, dressing materials, prevention of scarring etc. This was a lively session with audience sharing their concerns and finding answers from the stalwarts.

Dr Chander Grover

Glimpses of 24th World Congress of Dermatology, Milan 2019



EXCERPTS FROM NAIL LITERATURE

NAIL: WHAT'S NEW?

Chojer P, Mahajan B B. Nail fold dermoscopy in collagen vascular disorders: A cross-sectional study. *Indian J Dermatol Venereol Leprol* 2019;85:439

The connective tissue disorders like systemic sclerosis, dermatomyositis, systemic lupus erythematosus and mixed connective tissue disorder, are often characterized by microangiopathic abnormalities of the nail folds. The aim of study was to evaluate finger nail capillary vascular abnormalities by dermoscopy and their correlation with cutaneous and systemic involvement in the patients of collagen vascular disorders in a study group of 30 patients. 16 (53.3%), 11 (36.7%) and 3 (10%) patients of systemic sclerosis, systemic lupus erythematosus and mixed connective tissue disorder, respectively were taken for the study. The commonest change was dilated capillaries in 21 (70%) patients, followed by capillary dropouts in 17 (56.7%) patients and avascular areas in 16 (53.3%) patients. Of 17 patients presenting with sclerodactyly, active, early and late patterns were seen in 7 (41.2%), 2 (11.8%) and 7 (41.2%) patients, respectively. Out of 13 patients with respiratory involvement, active, early and late patterns were seen in 1, 1 and 7 (53.8%) patients, respectively.

Comments: Nail fold dermoscopy is an established tool to assess the microangiopathy in systemic collagen disorders. A dermoscope is a new, noninvasive, diagnostic tool that visualizes subtle clinical patterns of skin lesions and subsurface skin structures not normally visible to the unaided eye. Various functional and structural abnormalities of the microcirculation play a central role in the pathogenesis of collagen vascular disorders. Nail fold capillaroscopy is a simple, noninvasive, inexpensive and useful tool for the study of microvasculature and thus help in prognosis of disease.

Rigopoulos D, Baran R, Chiheb S et al. Recommendations for the definition, evaluation, and treatment of nail psoriasis in adult patients with no or mild skin psoriasis: A dermatologist and nail expert group consensus. *J Am Acad Dermatol*. 2019 Jul;81(1):228-240.

The management of nail psoriasis is often challenging. Topical treatment can be regarded as time-consuming and provides moderate efficacy, whereas systemic treatment is frequently less favored. The aim of this consensus was to provide practical recommendations for the management of nail psoriasis in patients without or with mild skin psoriasis.

Comments: For nail psoriasis involving more than a few nails, the patients' needs and the impact the disease has on their QoL should be considered when determining treatments.

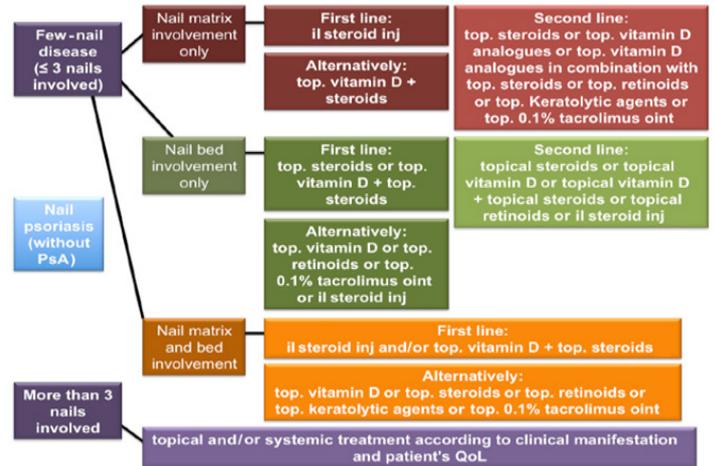


Fig 1. Clinical treatment algorithm for nail psoriasis according to the number of nails involved and the location of the psoriatic lesion. *il*, Intralesional; *inj*, injection; *oint*, ointment; *PsA*, psoriatic arthritis; *QoL*, quality of life; *top.*, topical.

Wu L, Chen W, Su J, Li F, Chen M, Zhu W, Chen X, Zhao S. Efficacy of a new combination superficial shaving with photodynamic therapy for recalcitrant periungual warts. *Photodiagnosis Photodyn Ther*. 2019 Jun 25.

Periungual warts are a viral infectious disease which are difficult to eliminate completely, and recurrence is common. Photodynamic therapy (PDT) as an option that has been widely recommended to treat viral warts. But, the limitation is of poor penetration of PDT into the tissue penetrating deep into tissue. Thus, we combined superficial shaving with PDT to treat recalcitrant periungual warts. It was an retrospective observational study from Jan 2016 to March 2017. Twenty-three patients had a total of 41 periungual wart lesions. There was 96% success rate (defined as more than 50% on clearance) in our 23 patients using combination superficial shaving with PDT after treatment for 3 months. 21 patients (91%) had excellent cosmetic outcomes at 12 months follow up. All patients had significant improvement in the quality of life. Pain during the illumination process was the main adverse event.

Comments: There is no single therapy that is proven effective at achieving complete remission in periungual warts. 5-aminolaevulinic acid (ALA)-PDT with red light generates endogenous molecular oxygen to kill microbes or viruses. This study shows promising result for combining superficial shaving with PDT as an effective and safe therapy for patients with periungual warts with thick corneum stratum of lesions. For nails that are not suitable for routine surgery, combined superficial shaving with PDT is recommended.

Zhou Y, Chen W, Liu ZR, Liu J, Huang FR, Wang DG. Modified shave surgery combined with nail window technique for the treatment of longitudinal melanonychia: evaluation of the method on a series of 67 cases, *Journal of the American Academy of Dermatology* (2019),

Nail matrix histopathological examination is still the gold standard to diagnose longitudinal melanonychia (LM). The

aim of the study was to introduce modified shave surgery combined with nail window technique for managing LM, and evaluate the postoperative outcome of the procedure. Retrospective study of 67 cases with LM who underwent shave surgery combined with longitudinal-strip nail window technique was done from March 2015 to June 2018. Forty-five (75.0%) cases had no postoperative nail dystrophy and the recurrence of nail pigmentation was only found in 8 (13.3%) cases.

Comments: Modified shave surgery combined with nail window technique is a preferable management for LM cases because of less chances of postoperative nail dystrophy and pigmentation recurrence. Compared to traditional exposure method by avulsion of the partial proximal nail plate, this method is tedious and visualisation of matrix cannot be done.

Yeung K, Ortner VK, Martinussen T, Paasch U, Haedersdal M. Efficacy of laser treatment for onychomycotic nails: a systematic review and meta-analysis of prospective clinical trials. Lasers Med Sci. 2019 Jun 29.

Laser therapy for onychomycosis is emerging but its efficacy remains unestablished. To examine current evidence on efficacy of laser treatment of onychomycosis. A systematic review and one-arm meta-analysis, including all prospective clinical trials, identified on PubMed, Cochrane Library, and EMBASE databases. Trials with participants as unit of analysis (UOA), $n = 13$, were analyzed separately from trials with nails as UOA, $n = 7$. Summary proportions and 95% confidence intervals (95% CI) were calculated. Outcomes were mycological cure, clinical improvement, or complete cure. Twenty-two prospective trials (four randomized controlled trials and 18 uncontrolled trials) with a total of 755 participants were analyzed. Summary proportions with 95% CI for participants as UOA were mycological cure 70.4%, 95% CI 52.2-83.8%; clinical improvement 67.2%, 95% CI 43.2-84.7%; and complete cure 7.2%, 95% CI 1.9-23.5%. High statistical heterogeneity was detected (mycological cure $I^2 = 88%$, $P < 0.01$; clinical improvement $I^2 = 69%$, $P < 0.01$; complete cure $I^2 = 60%$, $P = 0.11$).

Comment: The current level of evidence is limited and with high heterogeneity, making it difficult to assess the true efficacy of laser treatment for onychomycosis. Larger randomized controlled trials with well-defined methodology are warranted.

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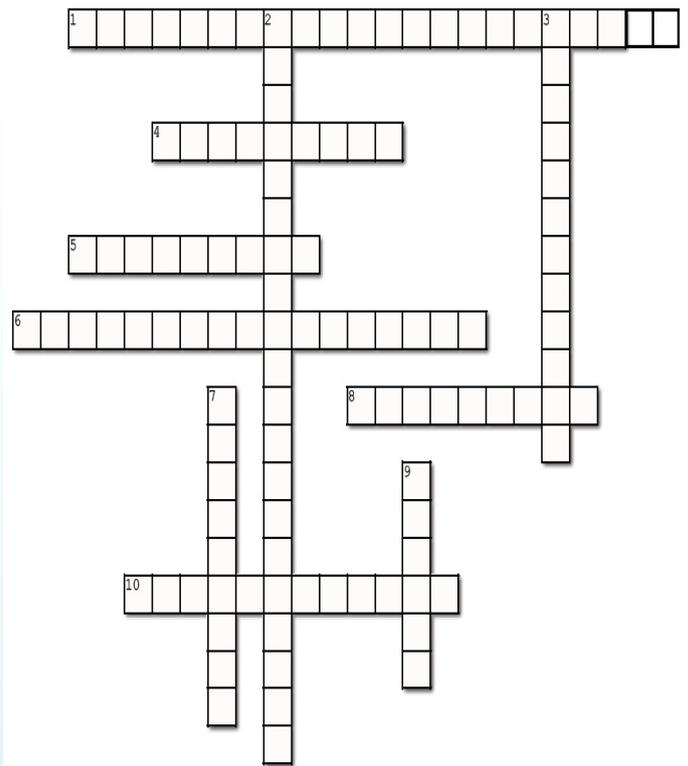
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NAIL MAZE



ACROSS

1. Term for thickened cuticle which is onion like
4. If a smoker stops smoking there is development of distinct demarcation between distal pigmented and proximal non pigmented nail
5. Pits located only above oil drop sign in psoriasis are known as
6. Loss of demarcation of margins of lunula in ischemia is
8. ART drug causing median nail dystrophy
10. Hyperkeratosis of lateral nail fold due to show rubbing against it

DOWN

2. First description of dorsal pterygium is known as
3. Another term for nail shedding
7. Longitudinal subungual red and/or white streaks in Darier's is known as
9. Yellowish discoloration followed by dark discoloration of nail in Brazilian pemphigus is known as which sign

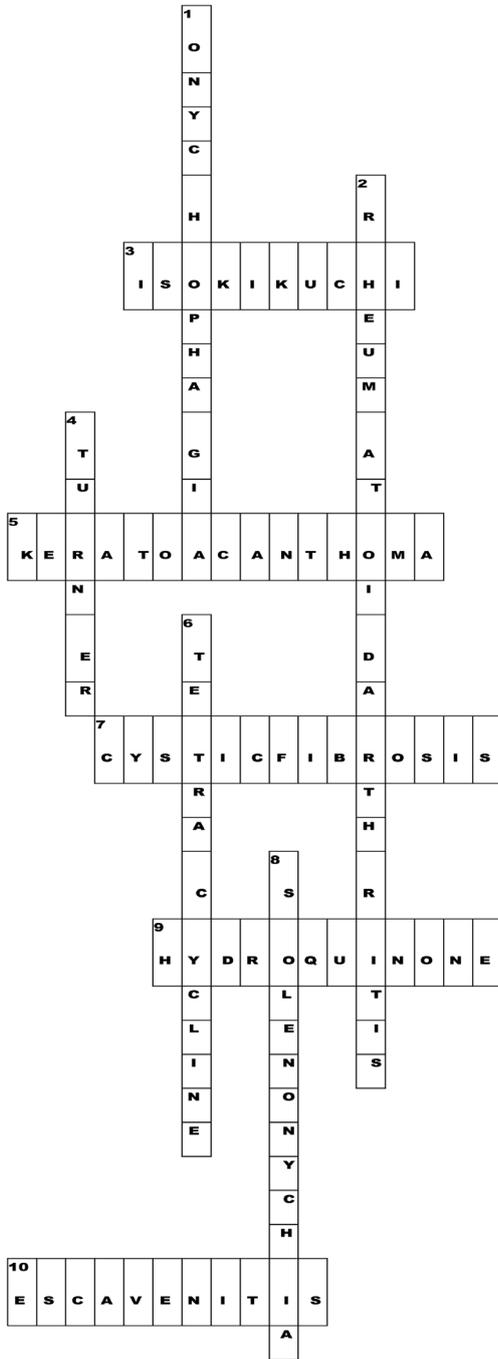
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ANSWER KEY to Nail Maze from Onychoscope Volume 8, Issue 1, January 2019



No correct entries were received.

ANSWER TO PHOTOQUIZ

Answer 1: This is a case of lichen planus of the nails. Nail lichen planus is found more commonly in the finger than toe nails, can affect all 20 nails simultaneously or as in this patient show skipped pattern in the initial stage. Most commonly, the nail changes consist of thinning, longitudinal ridging, and distal splitting of the nail plate. Pterygium is a classic finding of lichen planus of the nail. The tenting or pup-tent sign is observed as a result of nail bed involvement that elevates the nail plate and may cause longitudinal splitting. Along with the clinical findings, histopathological examination of nail unit is often necessary for diagnosis. Presence of linear lichenoid infiltrate in the nail bed and nail matrix along with diffuse hypergranulosis and colloid bodies is confirmatory. Nail plate can show compact orthokeratosis and focal parakeratosis. (Fig 2)

Answer 2: Onychoscopic examination shows features of nail involvement depending on the focus of origin whether nail matrix, bed or paronychia origin. In this patient onychoscopy (Dermlite DL4, contact, polarised mode, dry examination) images better delineate the changes including severe longitudinal ridging and splinter haemorrhages. (Fig 3)

Answer 3: Failure to treat NLP results in nail loss or permanent nail dystrophy often. Therefore the condition should be treated effectively as early as possible. Topical corticosteroid therapy is commonly considered as a first-line treatment for NLP but is ineffective. Systemic corticosteroids are preferred in cases that are rapidly progressive or involve more than three nails. Other treatment options include Triamcinolone acetonide (2.5-10mg/ml) delivered 0.1-0.2ml/nail repeated at 4 weekly intervals till desired improvement, topical tacrolimus, oral acitretin and etanercept.



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Dr Chander Grover



Dr Shikha Bansal

ONYCHOCON 2019

8th National Conference of the Nail Society of India (NSI)

3rd-4th November 2019

Hilton Mumbai International Airport Hotel

Organized by



In Association with



IADVL Maharashtra (Mumbai Chapter)
& IADVL Maharashtra Academy

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Delegate	Rs. 6000/- (incl. GST)	Rs. 7000/- (incl. GST)
PG Student	Rs. 4500/- (incl. GST)	Rs. 5000/- (incl. GST)

ONYCHOCON 2019 Team

Organizing Chairperson	Dr. Sushil Tahiliani
Organizing Co-Chairperson	Dr. Nina Madnani
Organizing Secretary	Col. Dr. Manas Chatterjee
Scientific Chairperson	Dr. Shital Poojary
Treasurer	Dr. Ashok Shah
Organizing Co-Secretary	Dr. Harsh Tahiliani
Scientific Co-Secretaries	Dr. Jimish Bagadia, Dr. Saurabh Jaiswal

Some of our esteemed Faculty



Robert Baran



Bertrand Richert



Anita Takwale



Archana Singal



Chander Grover



Vineet Relhan



Soni Nanda



Manas Ranjan Puhan



Subrata Malakar



Savitha Somaiah